

INTERNATIONAL
MOTOR CAR
COMPANY



Haverley

ELECTRIC
VEHICLES



INDIANAPOLIS, IND., U. S. A.

1903

WAVERLEY ELECTRIC VEHICLES



WAVERLEY DEPARTMENT

INTERNATIONAL
MOTOR CAR COMPANY
INDIANAPOLIS : INDIANA : U. S. A.



THE Waverleys which are illustrated and described herein, represent the highest attainment in successful electric vehicle construction.

Our line for this season is one of unsurpassed beauty and excellence, and is superior in all points to anything of a similar nature heretofore produced.

Your attention is particularly called to the ample range in the matter of price, design and style which our production affords, covering as it does vehicles of various types from the light Run-about for pleasure purposes, to the Department Store Delivery Wagon.

Our experience during the past several seasons in the exclusive manufacture of the electric type of machine, has been so extensive as to enable us to produce a vehicle which is not an experiment, but, instead, is one of practical utility and economy, and as such, is the acknowledged standard of its class.

OUR best efforts have always been lent towards supplying a vehicle of efficiency, simplicity, durability, and beauty of design.

The successful combination of these essential features is characteristic of the Waverley, and the verdict of a critical riding public demonstrates conclusively that the product of this factory stands pre-eminent as one of unsurpassed merit and excellence.

The accomplishment of this result is due:

1. To the fact that all parts entering into the makeup of the Waverley are produced exclusively in our own factory.
2. To advanced methods in vehicle construction which have been promptly inaugurated from time to time as necessity demanded.
3. To unceasing care and watchfulness exercised in every department by competent men who are specially fitted by long experience to perform the duties which devolve upon them.
4. To the high grade quality of material used, the selection of which has been made regardless of cost, so as to insure reliability and durability.

WE desire to call particular attention to our motor, which is of a new and improved pattern, of the multipolar type, which, having a very high overload capacity, is specially adapted for hill climbing.

We also wish to call special attention to the electric brake, which is exclusively a Waverley feature.

This is operated independent of the foot brake, and is manipulated through the controller handle, by means of which the motor is converted into a generator, thereby producing sufficient current, which is thrown automatically through resistance, for retarding the speed of the vehicle.

This device is particularly desirable in descending grades, for which purpose it is preferable to the ordinary foot brake in general use.

The Waverley presents no mechanism of an enigmatical nature which must be solved each time the vehicle is operated,—instead, it is a vehicle the operation of which is simplicity itself. For that reason, as well as its "always ready" accessibility, it is the most desirable method of transit for business or pleasure purposes or for ladies' use, and is replete throughout with features affording convenience of operation and comfort in riding.

The electric proposition is attractive, because it is clean, noiseless, easily controlled, and affords a maximum of comfort and a minimum of annoyance.



Model No. 21
Road Wagon
Price \$850



Specifications of Waverley Model No. 21

- Body** Piano box pattern; length, 5 feet 10 inches; wheel base, 5 feet 1 inch; width of seat, inside measurement, 36 inches; height from ground, 25 inches; tread, 4 feet 6 inches.
- Standard Finish** Black body, black or Brewster green panels, olive green or coach red gears and wheels.
- Upholstering** ... Handsomely finished in hand buffed dark green leather.
- Wheels** Wire or wood, 30 inches diameter, fitted with 2 1/2-inch G & J detachable pneumatic tires.
- Motor** The motor equipment consists of one 3-H. P. motor of new design, which is capable of an overload capacity of an additional 3-H. P. Speeds, 5 to 15 miles per hour.
- Gearing** The driving and pinion gears are of the "herring-bone" type, running in oil, and protected in dust-proof cases.
- Instruments** ... Each vehicle is equipped with a Keystone combination volt-ammeter.
- Brakes** Each vehicle is equipped with an electric brake in addition to the regular foot brake.
- Battery** ... Each vehicle is equipped with a 24-cell battery affording 48 volts.

OPTIONS

- Finish** Color combinations other than standard can be furnished in about two weeks.
- Upholstering** ... Tan leather or gray whipcord.



Model No. 22
Road Wagon with Top
Price \$900



Specifications of Waverley Model No. 22

- Body**..... Piano box pattern; length 5 feet 10 inches, wheel base, 5 feet 1 inch; width of seat, inside measurement, 36 inches; height from ground, 25 inches; tread, 4 feet 6 inches.
- Standard Finish** Black body, black or Brewster green panels, olive green or coach red gears and wheels.
- Top**..... Full leather, hand buffed, fitted with detachable side curtains and rubber storm apron.
- Upholstering**... Handsomely finished in hand buffed dark green leather.
- Wheels**..... Wire or wood, 30 inches diameter, fitted with 2 1/2-inch G & J detachable pneumatic tires.
- Motor**..... The motor equipment consists of one 3-H. P. motor of new design, which is capable of an overload capacity of an additional 3-H. P. Speeds, 5 to 15 miles per hour.
- Gearing**..... The driving and pinion gears are of the "herringbone" type, running in oil, and protected in dust-proof cases.
- Instruments**... Each vehicle is equipped with a Keystone combination volt-ammeter.
- Brakes**..... Each vehicle is equipped with an electric brake in addition to the regular foot brake.
- Battery**..... Each vehicle is equipped with a 24-cell battery affording 48-volts.

OPTIONS

- Finish**..... Color combinations other than standard can be furnished in about two weeks.
- Upholstering**... Tan leather or gray whipcord.



Model No. 20

Surrey

Price \$1,500



Specifications of Waverley Model No. 20

- Body** Straight sill; panel seat; length, 8 feet 1 inch; wheel base, 6 feet 5 $\frac{1}{2}$ inches; width of seat, inside measurement, 41 inches; height from ground, 25 inches; tread, 4 feet 6 inches.
- Standard Finish** Black body, Brewster green panels, with red trimmings; coach red gears and wheels.
- Upholstering** Handsomely finished in hand buffed dark green leather.
- Wheels** Wood, 30 inches diameter, fitted with 3 $\frac{1}{2}$ -inch G & J detachable pneumatic tires on rear wheels, and 3-inch G & J detachable pneumatic tires on front wheels.
- Motor** The motor equipment consists of two 3-H. P. motors of new design, each capable of an overload capacity of an additional 3-H. P. Speeds, 5 to 15 miles per hour.
- Gearing** The driving and pinion gears are of the "herring-bone" type, running in oil, and protected in dust-proof cases.
- Instruments** Each vehicle is equipped with a Keystone combination volt-ammeter.
- Brakes** Each vehicle is equipped with an electric brake in addition to the regular foot brake.
- Battery** Each vehicle is equipped with a 40-cell battery affording 80 volts.

OPTIONS

- Finish** Color combinations other than standard can be furnished in about two weeks.
- Upholstering** Gray whipcord.
- Canopy Top** We will equip this vehicle with a canopy top at an extra price of \$75.00. (See small illustration.)



Model No 23
Delivery Wagon
Price \$1,400



Specifications of Waverley Model No. 23

- Body** Carrying capacity space: length, 5 feet 2 inches; width, 3 feet; height, 4 feet 2 inches, inside; height from ground, 25 inches; wheel base, 6 feet 8 inches; tread, 4 feet 6 inches; length of body over all, 8 feet 3 inches.
- Standard Finish** Brewster green body, coach red gears and wheels.
- Upholstering** . . . Handsomely finished in hand buffed tan leather.
- Wheels** Wood, 30 inches diameter, fitted with 3 1/2-inch G & J detachable pneumatic tires.
- Motors** The motor equipment consists of two 3-H. P. motors of new design, each capable of an overload capacity of an additional 3-H. P. Speeds, 5 to 12 miles per hour.
- Gearing** The driving and pinion gears are of the "herring-bone" type, running in oil, and protected in dust-proof cases.
- Instruments** . . . Each vehicle is equipped with a Keystone combination volt-ammeter.
- Brakes** Each vehicle is equipped with an electric brake in addition to the regular foot brake.
- Battery** Each vehicle is equipped with a 40-cell battery affording 80 volts.

OPTIONS

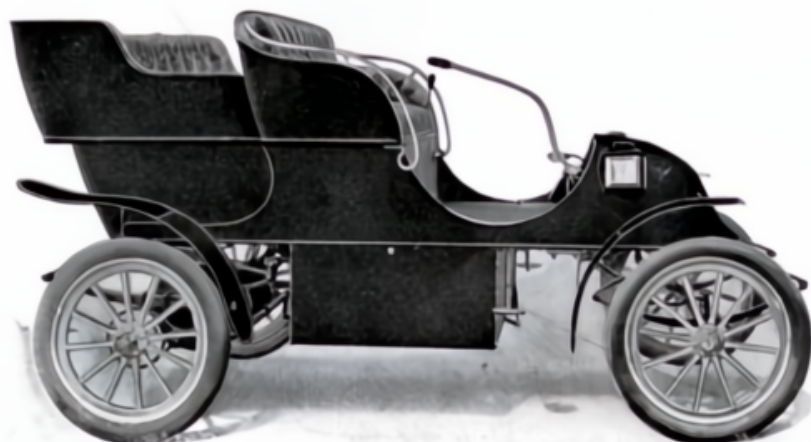
- Finish** Color combinations other than standard can be furnished in about two weeks.
- Upholstering** . . . Hand buffed dark green leather.
- Without Top** . . . This vehicle can also be furnished without top. (See small illustration.)



Model No. 25

Tonneau

Price \$1,800



Specifications of Waverley Model No. 25

Body Straight sill; length, 9 feet 2 inches; wheel base, 7 feet; width of front seat, inside measurement, 40 inches; height from ground, 25 inches; tread, 4 feet 6 inches.

Standard Finish Carmine body, automobile red gears and white wheels.

Upholstering . . . Handsomely finished in hand buffed dark green leather.

Wheels Wood, 30 inches diameter, fitted with 3 1/2-inch G & J detachable pneumatic tires on rear wheels, and 3-inch G & J detachable pneumatic tires on front wheels.

Motors The motor equipment consists of two 3-H. P. motors of new design, each capable of an overload capacity of an additional 3-H. P. Speeds, 5 to 15 miles per hour.

Gearing The driving and pinion gears are of the "herring-bone" type, running in oil, and protected in dust-proof cases.

Instruments . . . Each vehicle is equipped with a Keystone combination volt-ammeter.

Brakes Each vehicle is equipped with an electric brake in addition to the regular foot brake.

Battery Each vehicle is equipped with a 40-cell battery affording 80 volts.

OPTIONS

Finish Color combinations other than standard can be furnished in about two weeks.

Upholstering . . . Hand buffed tan leather.



Model No. 26

Chelsea

Price \$1,000



Specifications of Waverley Model No. 26

Body.....Straight sill; swelled panels; length, 8 feet 1 inch; wheel base, 6 feet 8 inches; width of seat, inside measurement, 41 inches; height from ground, 25 inches; tread, 4 feet 6 inches.

Standard Finish Carmine body, automobile red gears and white wheels.

Upholstering...Handsomely finished in hand buffed dark green leather.

Wheels.....Wood, 30 inches diameter, fitted with 3-inch G & J detachable pneumatic tires on rear wheels, and 2 1/2-inch G & J detachable pneumatic tires on front wheels.

Motor.....The motor equipment consists of one 3-H. P. motor of new design, which is capable of an overload capacity of an additional 3-H. P. Speeds, 5 to 15 miles per hour.

Gearing.....The driving and pinion gears are of the "herringbone" type, running in oil, and protected in dust-proof cases.

Instruments...Each vehicle is equipped with a Keystone combination volt-ammeter.

Brakes.....Each vehicle is equipped with an electric brake in addition to the regular foot brake.

Battery.....Each vehicle is equipped with a 24-cell battery affording 48 volts.

OPTIONS

Finish.....Color combinations other than standard can be furnished in about two weeks.

Upholstering...Tan leather or gray whipcord.

Top.....We will equip this vehicle with a full leather hand buffed top at an extra price of \$75. (See small illustration.)

Model No. 27



Stanhope

Price \$1,400

Specifications of Waverley Model No. 27

- Body**.....Straight sill; swelled panels; length, 6 feet 7½ inches; wheel base, 5 feet 10 inches; width of seat, inside measurement, 38 inches; height from ground, 25 inches; tread, 4 feet 6 inches.
- Standard Finish** Black body, carmine trimmings, coach red gears and wheels.
- Top**.....Straight grained hand buffed full leather top, and rubber storm apron.
- Upholstering**...Elegantly finished in dark green broadcloth.
- Wheels**.....Wood, 30 inches diameter, fitted with 3-inch G & J detachable pneumatic tires.
- Motor**.....The motor equipment consists of one 3-H. P. motor of new design, which is capable of an overload capacity of an additional 3-H. P. Speeds, 5 to 15 miles per hour.
- Gearing**.....The driving and pinion gears are of the "herring-bone" type, running in oil, and protected in dust-proof cases.
- Instruments**...Each vehicle is equipped with a Keystone combination volt-ammeter.
- Brakes**.....Each vehicle is equipped with an electric brake in addition to the regular foot brake.
- Battery**.....Each vehicle is equipped with a 24-cell battery affording 48 volts.

OPTIONS

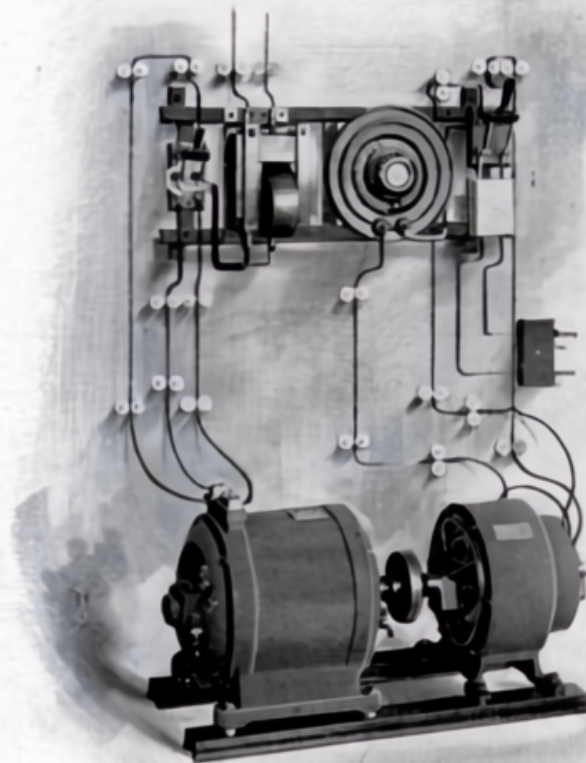
- Finish**.....Color combinations other than standard can be furnished in about two weeks.
- Upholstering**...Any color of broadcloth.



The noiseless running of Waverley vehicles is due to the use of the "herring-bone" form of gear teeth for transmitting the power from the motor shaft. The large gear is made of gunmetal, and the small pinion of solid steel, and both parts run in oil, in a substantial dust-proof case. The teeth are cut in an angular direction across the faces of the gear and pinion, and this construction entirely obviates all gear noise, and at the same time insures great durability of the parts. These gears and pinions will run for years without renewing.

On the other hand, when electric vehicles are equipped with ordinary, straight-tooth gearing, a very objectionable gear noise is the unavoidable result. Some makers attempt to reduce this noise by using pinions of some soft material, such as fibre or rawhide. Inasmuch as these soft pinions have no durability and are in constant danger of breaking, the use of them to eliminate noise can hardly be regarded otherwise than as a cheap makeshift.

The manufacture of our "herring-bone" gearing is an expensive process, but the advantages of noiseless running, and security from break-downs, abundantly justify the increased cost.



The above cut illustrates a one-horsepower Motor-Generator charging outfit, for use in connection with a single phase alternating current circuit of from 100 to 110 volts, low frequency (60 cycles).

This outfit will give a direct current of about 15 amperes at 65 volts when charging a 24-cell battery, or about 10 amperes when charging a 30-cell battery. Price \$200.

For use in connection with a 500-volt direct circuit we are prepared to furnish a one-horsepower Motor-Generator outfit, which has a capacity of about 15 amperes at 65 volts when charging a 24-cell battery, or about 10 amperes when used for charging a 30-cell battery. Price, \$175.

Independent Gasolene Charging Plant

WE ARE prepared to furnish a gasolene engine, of an improved type, which in connection with a generator, wound for 65 volts, will afford sufficient current for charging one runabout at a high rate, or two runabouts at a lower rate.

If it is desired to charge a vehicle having an 80-volt battery, it will be necessary to so specify, in order that the generator may be wound for 110 volts. The economy and value of this gasolene plant is very apparent, affording as it does an inexpensive method of producing current for charging purposes or otherwise. This plant is compactly built, and when installed for operation occupies only a small amount of space.

The above described outfit consists of a 3-H. P. gasolene engine, generator and switches complete. Price \$250.00.

Terms

One Hundred Dollars cash with order, balance C. O. D., or if by freight, subject to Sight Draft with bill of lading attached.

Machines F. O. B. at Indianapolis.

Remittances should be made by Exchange on New York, or by Express Money Order or Post-Office Money Order.

Orders executed in rotation as received.



